

PDK1 Antibody
Rabbit mAb
Catalog # AP91356

Specification

PDK1 Antibody - Product Information

Application	WB, IP
Primary Accession	Q15118
Reactivity	Rat
Clonality	Monoclonal
Other Names	
Mitochondrial pyruvate dehydrogenase kinase isoenzyme 1; PDH kinase 1; Pdk1; Pyruvate dehydrogenase kinase isoform 1; Pyruvate dehydrogenase kinase, isoenzyme 1;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	49244 Da

PDK1 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PDK1
Description	Inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

PDK1 Antibody - Protein Information

Name PDK1

Synonyms PDHK1

Function

Kinase that plays a key role in regulation of glucose and fatty acid metabolism and homeostasis via phosphorylation of the pyruvate dehydrogenase subunits PDHA1 and PDHA2 (PubMed: 7499431, PubMed: 18541534, PubMed: 22195962, PubMed: 26942675, PubMed: 17683942). This inhibits pyruvate dehydrogenase activity, and thereby regulates metabolite flux through the tricarboxylic

acid cycle, down-regulates aerobic respiration and inhibits the formation of acetyl-coenzyme A from pyruvate (PubMed:18541534, PubMed:22195962, PubMed:26942675). Plays an important role in cellular responses to hypoxia and is important for cell proliferation under hypoxia (PubMed:18541534, PubMed:22195962, PubMed:26942675).

Cellular Location

Mitochondrion matrix

Tissue Location

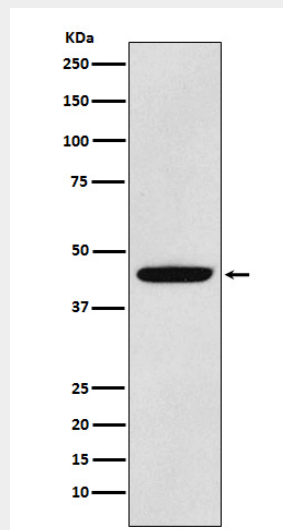
Expressed predominantly in the heart. Detected at lower levels in liver, skeletal muscle and pancreas

PDK1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PDK1 Antibody - Images



Western blot analysis of PDK1 expression in LNCaP cell lysate.